

## **EXECUTIVE SUMMARY**

On May 11, 2003, three members of a Type 6 engine crew from the Nogales Ranger District were entrapped by wildland fire during initial attack on the A-Bar Fire on the Sierra Vista Ranger District, Coronado National Forest. The engine captain and two crewpersons were on foot, away from their engine, preparing to burn out an area along the flank of the main fire. Winds shifted suddenly and wind velocity increased rapidly, causing numerous spot fires ahead of the main fire. The firefighters recognized that they had been cut off by spot fires from their designated escape route, identified and burned out a safe zone, and deployed their fire shelters.

After the fire had burned around the deployment area and had cooled down, another member of the engine crew, not involved in the deployment, drove the crew's chase pickup from a staging area outside the fire up to the deployment area and retrieved the three firefighters. None of the firefighters who had deployed were injured. The chase pickup received minor damage when a drip torch fell over in the bed of the pickup, leaking fuel. The fuel ignited from burning embers in the air.

## **NARRATIVE AND TIMELINE**

The A-Bar Fire was reported at approximately 1:00 p.m. on Sunday, May 11, 2003, on the Sierra Vista Ranger District, Coronado National Forest. The first suppression resources to arrive at the fire were the Patagonia Fire Department Engine 458 and Helicopter 320. At that time, the fire was approximately two acres on the south side of a drainage, spreading slowly in grass with occasional torching in manzanita. Winds were light. Just before 2:30 p.m., Engine 36 from the Sierra Vista Ranger District arrived on scene, and Eric Lathrop, Engine 36 Supervisor, assumed responsibility as the Incident Commander.

### **Pre-Deployment**

Engine 22 from the Nogales Ranger District was dispatched at 1:30 p.m. and arrived at the incident at approximately 2:30 p.m. Engine 22 was staffed that day by Miguel Grambs (Engine Supervisor), Josh McGee (Assistant Engine Supervisor), Justin Maloney (Lead Crewperson), Jesus Tapia (Crewperson) and Cesar Amaya (Crewperson). This five-person crew was using two vehicles – Engine 22, a Type 6 fire engine (FS#3502), and a chase pickup (Dodge Ram 2500, FS#4280). Upon arrival, Engine 22 Supervisor Grambs sought out IC Lathrop and requested instructions. Lathrop directed the crew to go to the bottom of the wash, secure the edge of the fire there, and work their way south on the right flank, tying in with the helitack crew working the south side of the fire at the top of the ridge. The crew parked their engine and chase truck at the staging area in the bottom of the drainage and began walking to their assigned area. Soon after, the crew noted that the fire had spotted across the drainage and was becoming more active, torching dead manzanita and spotting further ahead of the main fire. Winds began to increase, and the fire began to move north up the slope, out of the drainage, and toward the engines parked at the staging area. As the fire moved closer to the parked vehicles, Grambs decided to move his crew back toward the engine.

Grambs, one of his crew, and one of the Sierra Vista employees who is a qualified burn boss began burning out along the north side of the drainage bottom to protect the vehicles in the staging area. Grambs then recommended and obtained agreement from IC Lathrop that he scout the east flank of the fire and determine the feasibility of a burnout from the two-track ridge road down to the drainage and back toward the main fire. He returned to the crew, briefed them on the plan, and left them to prepare drip torches and wait for his call to walk to the top of the ridge. Grambs intended that the crew would start burning at the top of the ridge and light fire back down to the drainage bottom.

Grambs then walked to the top of the ridge and scouted the top of the ridge for a location to burn out. He called the crew on the radio and instructed them to walk up to join him at the top of the ridge. While waiting for the crew to come up, Grambs called for the helicopter to drop water and cool off the head of the fire. By the time the crew got to the ridge, the wind had shifted, and the fire began moving faster toward them. Grambs directed McGee and Amaya to return, get the vehicles, and drive back up the two-track to pick up the other three. Grambs, Maloney and Tapia waited on top of the ridge. McGee and Amaya returned to the vehicles. Amaya drove the chase truck and McGee drove the engine up the road toward the ridge. They drove partway, found that the fire had spotted across the two-track road, and were not able to drive further. They pulled both vehicles off to the right side of the road into a small flat and waited. After trying to call Grambs on the radio several times with no response, they drove the vehicles back down to the ICP/staging area.

As the three crewmen waited on top of the ridge for the vehicles to drive up, they noticed a new spot fire to the southeast growing rapidly and moving toward them. They saw that the fire had spotted across the two-track road, cutting off their escape. Grambs looked for a new escape route, tried but couldn't reach the IC on the radio, and began looking for a safety zone. Just east of where the two-track road intersected the ridge road, he found a small grassy area north of the road and burned it off. After lighting a strip on the south side of the road to increase the size of the safety zone, he ordered the shelter deployment.

Radio traffic was constant on Fire Net. Efforts by the crew to communicate with the IC were difficult to impossible because of heavy radio traffic. As the situation deteriorated, Grambs used District Net to inform McGee of the intent to deploy fire shelters.

### **Fire Shelter Deployment**

Grambs gave the order to deploy. After throwing drip torches and fusees away, Grambs, Maloney and Tapia deployed their fire shelters in the black area for about 30 seconds, then realized they were too close to heavier fuel. They all got up with shelters on and moved within the burned area to a second position closer to the road. The crewmembers talked constantly to each other as they lay under the shelters, and estimated that they remained in the shelters for about five minutes. Tapia had discarded his pack prior to deploying his shelter because his fusees were inside; the other two employees kept their packs on while inside the shelters. While all three crewmembers experienced significant radiant heat, none were injured.

### **Post-Deployment**

As the intensity of the fire decreased, McGee drove the chase truck up to the deployment site. He called to the three on the ground, and they got up and got into the truck. Maloney and Tapia climbed into the back of the truck, keeping their fire shelters wrapped around them for protection from radiant heat. McGee put two drip torches into the bed of the pickup. Grambs talked to IC Lathrop from the rear of the truck on Fire Net, then got into the cab of the pickup. McGee then drove the truck back down to the staging area. During the trip down, the drip torches fell over, leaked fuel and ignited. Maloney extinguished the fire and tossed the drip torches from the truck. This fire inside the pickup bed caused damage to several items in the bed of the pickup and to plastic covering the bumper. Engine 22 was not used to retrieve the three crewmembers and did not sustain any damage throughout the incident.

At approximately 4:00 p.m., Sierra Vista RD Fire Management Officer Bill Wilcox took over as Incident Commander. Wilcox pulled all resources back from the fire to regroup, tried several times to have ground forces re-engage the fire without success, and continued suppression action with air resources only. He directed the Law Enforcement Officer, Bob Aydelotte, to get statements from each of the Engine 22 crew. Crewmembers provided written statements, then departed the incident for Nogales at approximately 6:00 p.m.

Sierra Vista District Ranger Steve Gunzel was notified of the fire shortly after 1:30 p.m. and left for the fire about 2:45 p.m. He participated in the decision to order a Type II Incident Command Team shortly after 4:00 p.m. and requested that Dispatch order an Entrapment Investigation Team after learning of the shelter deployment. He also ordered a Critical Incident Stress Debriefing team.

A Type II Incident Command Team took over the fire on May 12<sup>th</sup>. The A-Bar Fire was contained at 6:00 p.m. on May 14<sup>th</sup>. The cause of the fire is thought to be an escaped warming or cooking fire.

## ) Sequence of Events

A timeline of events that occurred on May 11<sup>th</sup> on the A-Bar Fire before, during and after the shelter deployment was reconstructed from the Dispatch Log and interview statements of those involved in the incident.

13:00 Initial report came into Patagonia Fire Department; two PFD engines and a water tender respond

13:15 Coronado Dispatch directs Engines 32 and 34 from Sierra Vista Ranger District to respond

13:21 Patagonia FD Engine 458 arrives on scene; reports fire is burning in grass, manzanita and oak with potential to become large with current wind conditions

13:24 Helicopter 320 dispatched to the fire

13:30 Coronado Dispatch moves communications to Fire Net and dispatches Engines 22 (Nogales RD) and 36 (Sierra Vista RD) to the fire

13:56 Patagonia FD 458 reports fire is two acres and fire behavior is not too aggressive

14:14 Helicopter 320 arrives at fire; two helitack members (Risch plus 1) on the fire

) 14:20 Engine 36 Captain Eric Lathrop assumes IC position

14:26 Engine 22 (Grambs plus 4) arrives on scene. Grambs is advised by the IC that the fire is about 10 acres but not really doing much. IC assigns Engine 22 crew to secure east flank of fire between the drainage and the helitack crew on the ridge on the south side of the fire.

14:35 One single-engine air tanker is dispatched to the fire

14:35 to 15:00 Engine 22 crew parks their engine and chase truck at the ICP/staging area; walks to assigned area; observes fire has spotted across drainage. Grambs moves crew back toward engines; starts burning out along drainage to protect vehicles at ICP/staging area; halts after 50-70 feet.

15:00 Grambs meets IC; proposes and gets approval to scout the two-track road on top of ridge for possible burnout to secure the right flank of the fire. Grambs directs crew to stay with vehicles and prepare for burnout; climbs to ridge road. Grambs soon calls the crew to bring drip torches up to ridge road.

15:16 Engine 22 requests Helicopter 320 to drop water at the head of the fire near the ridge road

15:21 IC advises Engine 22 that he is moving to a better location for radio transmission

) 15:24 Engine 22 reports fire has jumped across ridge road and crew is returning to trucks. Grambs observes wind shift causing fire to move faster toward the crew; he is still waiting for two

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crewmembers to reach the ridge. As they do, Grambs observes fire has moved much closer and sends McGee and Amaya back downhill to get the vehicles and come back to pick up rest of crew. While waiting for vehicles to come up, Grambs observes fire has spotted across the two-track escape route back to the ICP and vehicles. McGee is unable to drive through fire that has spotted across the access road. Grambs locates potential deployment and burns fuel off. The three crewmembers deploy shelters soon after.

- 15:35 IC reports possible shelter deployment. As soon as fire cools down, McGee drives chase truck up to the ridge road and deployment site; calls to the three crewmen; crewmen get into chase truck and evacuate; return to ICP/staging area.
- 15:42 Everyone on the fire ordered to pull back
- 15:44 Engine 22 confirms that three crewmen deployed their fire shelters and that there are no injuries
- 16:00 Bill Wilcox, Sierra Vista FMO, assumes IC responsibilities from Lathrop

## FACTS AND FINDINGS

### Facts

Sources are listed in parentheses.

1. Radio traffic was constant on Fire Net. (Statements – Maloney, McGee, Tapia, Grambs, Amaya)
2. Initial assignment for Engine 22 was to go to bottom of wash at head of fire and begin working right flank of fire. (Statements – Maloney, McGee, Tapia, Lathrop, Grambs, Amaya)
3. The safety zone was the ICP/staging area. (Statement – Grambs; Fire Operations Technical Specialist Report)
4. Upon arrival of Engine 22, IC was Eric Lathrop. (Statements – Maloney, Tapia, Gunzel, Wilcox, Lathrop, Grambs, Amaya)
5. The north side of the wash was burned out near the ICP/staging area to protect the vehicles. (Statements – Tapia, McGee, Grambs, Amaya)
6. Grambs scouted from the wash to the top of the ridge for a location from which to burn out. (Statements – Maloney, McGee, Tapia, Lathrop, Grambs, Amaya)
7. Grambs instructed his crew to walk up with drip torches and join him at the top of the ridge. (Statements – Maloney, McGee, Tapia, Grambs, Amaya)
8. Grambs asked Amaya and McGee to go back to the ICP/staging area and get vehicles. (Statements – Maloney, McGee, Tapia, Grambs, Amaya)
9. Fire spotted across two-track road and cut off escape route to vehicles for Grambs, Tapia, and Maloney. (Statements – Maloney, McGee, Tapia, Grambs, Amaya)
10. Efforts by Engine 22 crew to communicate with IC were hampered due to excessive ongoing radio traffic. (Statements – Maloney, McGee, Tapia, Grambs)
11. District Crew Net (Channel 5) was used to inform McGee about a plan to deploy. (Statements – Maloney, McGee, Tapia)
12. The entrapped crewmembers burned off an area for deployment. (Statements – Grambs, Maloney, Tapia)
13. First deployment was relatively short (approximately 30 seconds). (Statements – Maloney, Grambs, Tapia)
14. Entrapped crewmembers then moved to another position in same area but closer to road. (Statements – Tapia, Maloney, Grambs)

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15. McGee drove chase truck to deployment site. (Statement – Maloney, McGee, Tapia, Grambs)
16. Entrapped crewmembers got into truck with shelters. (Statements – McGee, Tapia, Grambs)
17. Drip torches were loaded into back of truck. (Statements – McGee, Grambs)
18. Torches fell over and fuel leaked into bed of pickup while returning to ICP/staging area. (Statements – Maloney, Tapia, Grambs)
19. Drip torch fuel ignited in bed of truck, but Maloney extinguished the fire with a red bag. (Statements – Grambs, Maloney, Tapia; Photo 6)
20. Drip torches were discarded from back of truck onto ground. (Statements – Tapia, Maloney, McGee)
21. Cooler, personal items, truck bumper and vehicle were damaged by the drip torch fire. (Photos 6, 9, 15, 17-20; Statement – Maloney)
22. Lookouts were neither utilized nor designated. (Statements – Tapia, Wilcox, Grambs, Maloney)
23. A tactical radio frequency was not designated. (Statements – McGee, Lathrop, Grambs)
24. Objectives and tactics were clear to most crewmembers. (Statements – McGee, Tapia)
25. Crew knew their escape route and safety zone. (Statements – Tapia, McGee, Grambs)
26. Initial attack was believed to be an easy task, and personnel were relaxed mentally. (Statements – McGee, Lathrop)
27. Winds were gusty and shifted from south to southwest. (Statement – McGee; Fire Behavior Technical Specialist Report)
28. Crewmembers wearing Kevlar pants did not experience as much heat on legs while in shelters as crewmember wearing GSA pants. (Statements – McGee, Tapia, Grambs)
29. This fire had three different ICs from approximately 1300 hours to 1600 hours. (Statements – Wilcox, Lathrop, Phelps)
30. No injuries were reported or observed by those deploying shelters. (Statements – Gunzel, Lathrop, Grambs)
31. Fire is believed to have been human-caused from a “cooking or warming fire.” (A-Bar Fire Information Fact Sheet – 5/14/03 - 4:00 pm Final - update; Fire Operations Technical Specialist Report; Fire Behavior Technical Specialist Report)
32. Deployment site was not initially secured. (Statement – Gunzel; Photo 12)
33. Deployment site integrity was compromised by an unknown dual-wheeled vehicle that drove into the site. (Photos 12, 13; Investigation Team site visit)

34. Large air tanker was not scheduled to go on contract at Libby Air Tanker Base for two more days (5/13). (Statement – Gunzel)
35. Area topography contributes to gusty and erratic afternoon winds. (Statement – Gunzel; Investigation Team site visit)
36. Chase truck has a dented right rear side panel; evidence of burns to the bumper liner, left rear taillight, and electrical wiring; and scorched paint near left rear taillight. (Photos 14-20; personal inspection by Chief Investigator)
37. Two Patagonia Fire Department engines and a tender responded to fire. (Statement – Wilcox)
38. Three Type 6 engines from Sierra Vista were dispatched to the fire. (Statement – Wilcox; Incident Activity Report)
39. The captain of Patagonia Engine 458 assumed initial IC duties. (Statement – Wilcox; Incident Activity Report)
40. Lathrop assumed the IC position from Patagonia 458. (Statements – Wilcox, Lathrop; Incident Activity Report)
41. Heavy air tanker was ordered at 1530 hours. (Statement – Wilcox; Incident Activity Report)
42. Wilcox assumed IC position at 1600 hours. (Statement – Gunzel; Incident Activity Report)
43. Tapia removed his pack prior to deployment. (Statements – Grambs, Tapia)
44. Grambs and Maloney kept their packs on while inside their shelters. (Statements – Grambs, Maloney)
45. Engine 22 was **not** damaged during this incident. (Photos 21, 22; Kandarian memo 5/17/03)
46. All Forest Service employees who operate Government vehicles (or private vehicles used on official duty) shall hold a valid State driver's license with the proper endorsements for the size and class being driven and a Forest Service-issued identification card indicating the type of vehicle or equipment the operator is authorized and qualified to operate. (7130 memo dated 6/24/99; FSH 6709.11-12.1)
47. Defensive driving training is required for all Forest Service employees who drive Government or private vehicles on official duty. Driver must attend a Forest Service or National Safety Council or equivalent defensive driving course at least every three years. (7130 memo dated 6/24/99; FSH 6709.11-12.11)
48. Shirt and pant designs shall be Forest Service-approved fabrics. (29 CFR 1910.132; FSH 6709.11-24.12)
49. Some Engine 22 crewmembers were wearing Kevlar fire pants. (Statements – Maloney, McGee)
50. Packs should be removed when deploying a fire shelter. (Incident Response Pocket Guide; "Your Fire Shelter," 2001 edition, page 8)

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51. McGee has not been issued an OF-346, U.S. Government Motor Vehicle Operator's Identification Card. (MOI – Early)
52. Based on Grambs' timesheet, crew was in compliance with work-rest guidelines. (OF-297, Emergency Firefighter Time Report)
53. No signed Job Hazard Analysis for engine operations exists. (MOI – Grambs, Zale)
54. There is no documentation specifically addressing PPE training. (MOI – Grambs)
55. Critical Incident Stress Debriefing Team ordered. (ICS-209, Incident Status Summary, dated 5/11/03, 1200 hours; Gunzel)
56. Grambs has U.S. Government Motor Vehicle Operator's Identification Card (OF-346) issued by Lakeside Ranger District, Lakeside, AZ (expiration date 6/28/04). In compliance with FSH 6709.11-12.1.
57. Engine 22 dispatched by Coronado Dispatch (Southeast Zone Coordination Center). (Incident Activity Report; Statement – Grambs)
58. "Fire Net" was used as tactical and logistical net. (Statements – Lathrop, Wilcox, Grambs)
59. Air-to-Ground (169.150) is assigned to the Coronado National Forest. (Southwest Area Mobilization Guide, pp. 70-71; MOI – Van Gordon; 2003 Coronado NF Fire Management Plan)
60. Helicopter 320 stated on Air-to-Ground...Helicopter Manager would not allow Helicopter to switch frequencies, even after IC requested it. (MOI – Van Gordon; Statement – Lathrop)
61. Engine 22 was on inter-crew district frequency, but was scanning Fire Net. (Statements – Grambs, McGee, Lathrop)
62. Refresher training and physical fitness standards (work capacity test) are current for Engine 22 Crew and Lathrop. (Forest Red Card Program)
63. Morning Briefing was conducted by Zale. Topics included "Six Minutes for Safety – topic of choice, Use of Escape Routes and Safety Zones," weather, temperatures, and relative humidity; winds, "What to expect out there." (Copy of calendar dated 5/11/03; MOI – Zale)
64. Fire size-up from Helicopter manager indicated fire was not doing much. (Aircraft Flight Tracking Sheet; MOI – Van Gordon)
65. At about 1400, Patagonia reported fire was two acres with not too aggressive fire behavior. (Incident Activity Report)
66. Critical incident stress debriefing should be completed within 24 hours with additional support available. (Investigating Wildland Fire Entrapments, 2001 Edition)

67. Guidance from the Region on when to issue a Forest Service-issued identification card indicating the type of vehicle or equipment the operator is authorized and qualified to operate is unclear. (MOI – Zale)

) 68. Some fireline personnel were unsure who the IC was. (Statements – Risch, Phelps)

69. Winds increased from 1-5 mph to 5-8 mph between 1500 hours and 1520 hours. (On-site weather observations taken by Sean Henry, 5/11/03)

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## **Findings**

Findings were derived from the facts listed above. Supporting facts are listed in parentheses.

1. Engine 22 crewmembers and overhead personnel were not mentally prepared for erratic and intense fire behavior. **(Facts – 26, 64, 65)**
2. Some Engine 22 crewmembers were not in compliance with the Forest Service standard for use of fire pants. **(Facts – 28, 48, 49)**
3. There is confusion concerning the established guidelines for the removal or wearing of packs in the fire shelter. **(Facts – 43, 44, 50)**
4. Not all equipment operators were issued Motor Vehicle Operator's Identification Cards (OF-346) as required by FSH 6709.11. **(Facts – 51, 56)**
5. Communication frequencies were not managed adequately on this fire. **(Facts – 10, 11, 23, 58-61)**
6. Four (#2, #5, #7, #10) of the Ten Standard Orders were compromised. **(Facts – 9, 10, 22; Fire Operations and Fire Behavior Technical Specialist Reports)**
  - Fire order # 2: "Know what your fire is doing at all times." **(Facts – 9, 22)**
  - Fire order #5: "Post lookouts when there is possible danger." **(Fact – 22)**
  - Fire order #7: "Maintain prompt communications with your forces, your supervisor and adjoining forces." **(Facts – 10, 23, 58, 60, 61)**
  - Fire order #10: "Fight fire aggressively, having provided for safety first." **(Facts – 9, 10, 22, 23, 58, 60, 61)**
7. Tailgate Safety Sessions (Safety Briefings), JHAs, and Defensive Driving are not being documented. **(Facts – 53, 54)**
8. The Hazard Abatement Plan for the Thirtymile Fire was not fully followed. **(Facts - 9, 10, 22, 23, 58, 60, 61, 68)**
9. Critical Incident Stress Debriefing (CISD) was delayed longer than recommended. **(Fact - 66)**
10. Eight of the 18 Watch Out Situations were not adequately mitigated. **(Fact 25; Fire Operations Report; Fire Behavior Technical Specialist Report)**
  - Fire not scouted and sized up.
  - Safety zones and escape routes identified but not adequate.
  - No communication link with crewmembers or supervisor.
  - Constructing fireline without a safe anchor point.
  - Building fireline downhill with fire below.
  - Unburned fuel between you and the fire.
  - Cannot see main fire, not in contact with anyone who can.

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- Getting frequent spot fires across line.
11. Did not follow the communications plan as identified in the 2003 Coronado NF Fire Management Plan. (Facts – 1, 10, 11, 23, 58, 60, 61)
  12. Mandatory fire training has been completed. (Fact 62)
  13. During a three-hour period (1:00 p.m. to 4:00 p.m.), three different ICs assumed command of this incident. Some personnel did not know who was in charge. (Facts – 4, 29, 39, 40, 42, 68)

## **MAPS, ILLUSTRATIONS, AND PHOTOGRAPHS**

General location (State map)

Coronado National Forest map

District map showing A-Bar fire location

Fire Progression map

Progression map with wind direction

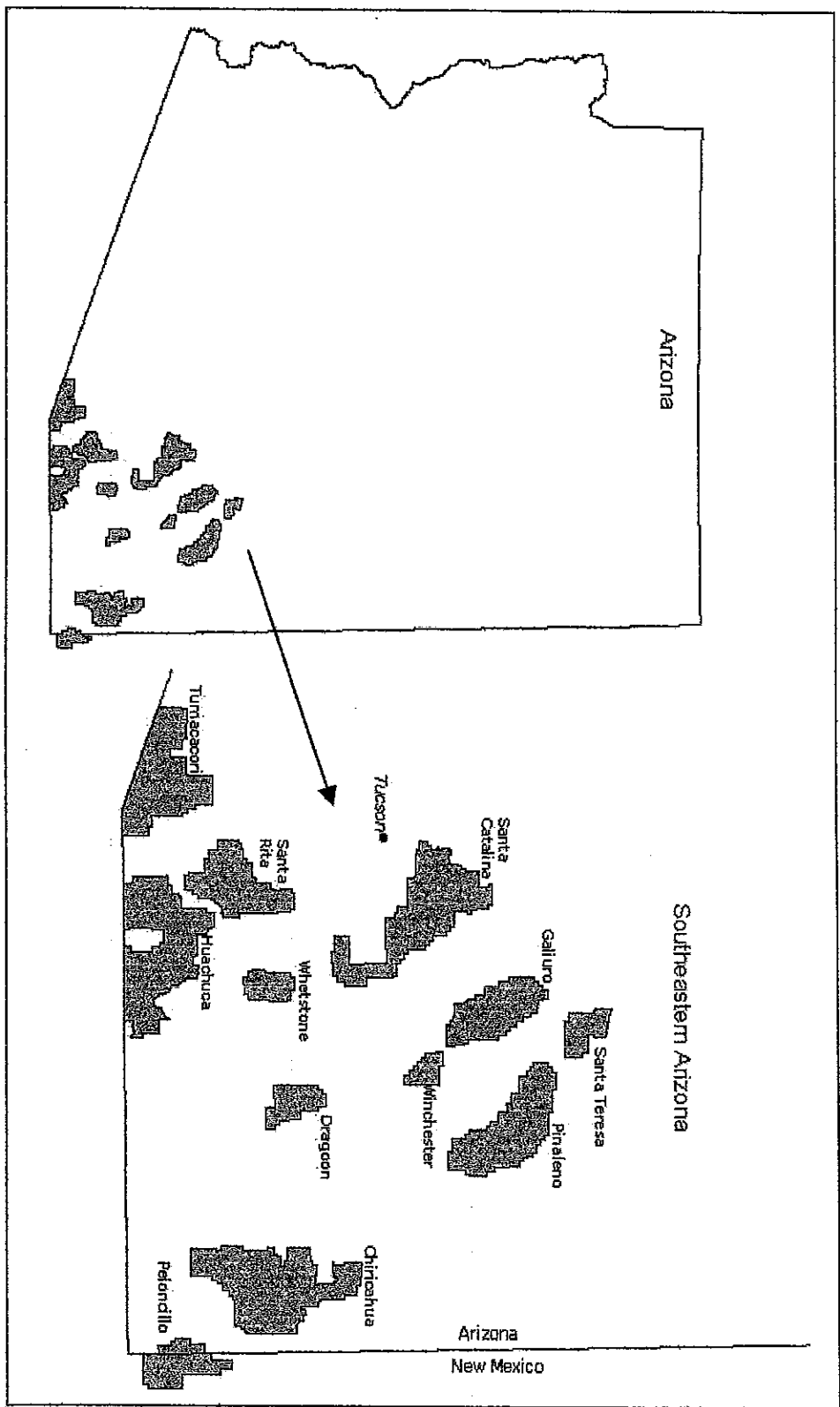
A-Bar fire perimeter

Deployment area diagram with photo points

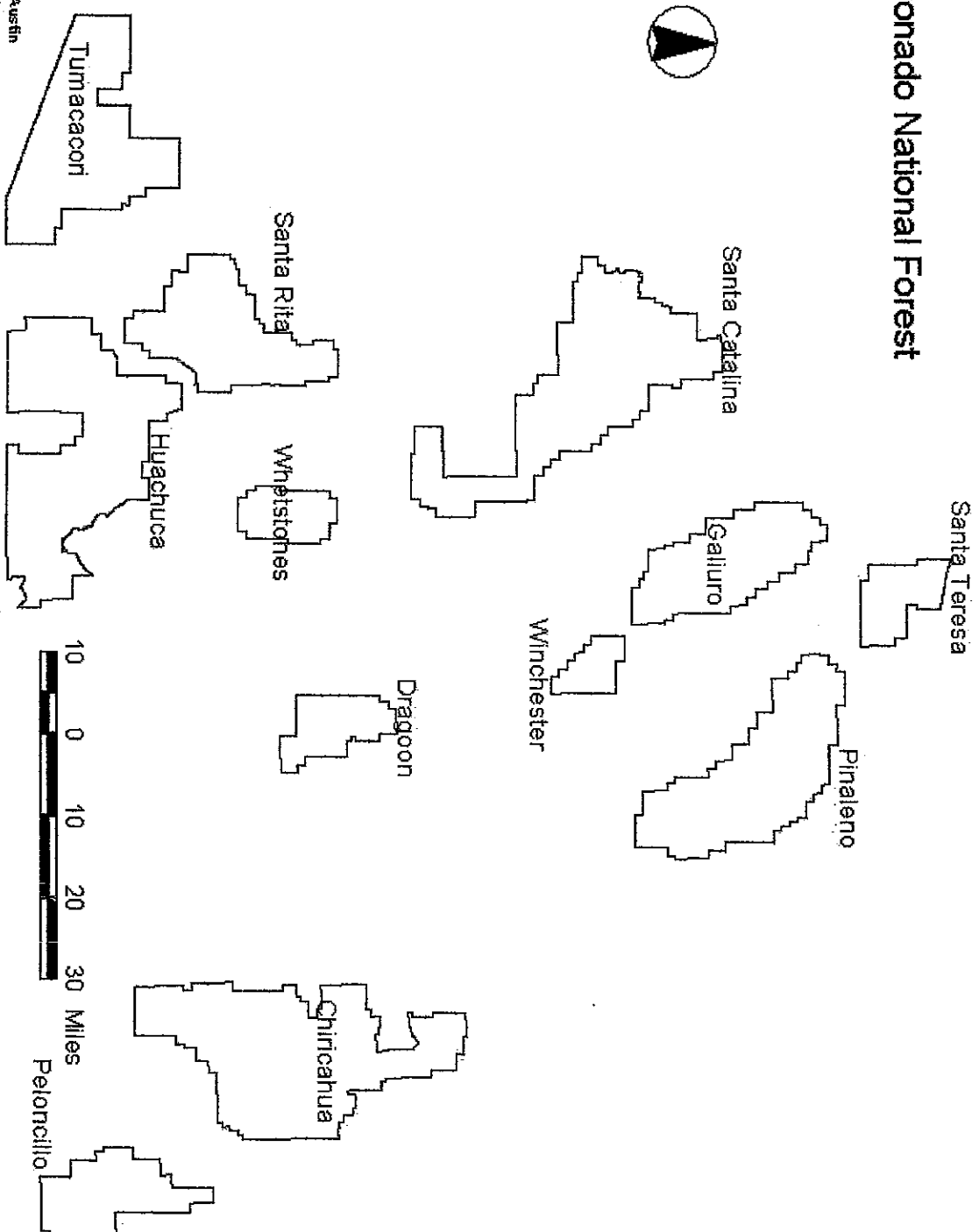
Photo log

Photographs (22 photos)

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# Coronado National Forest

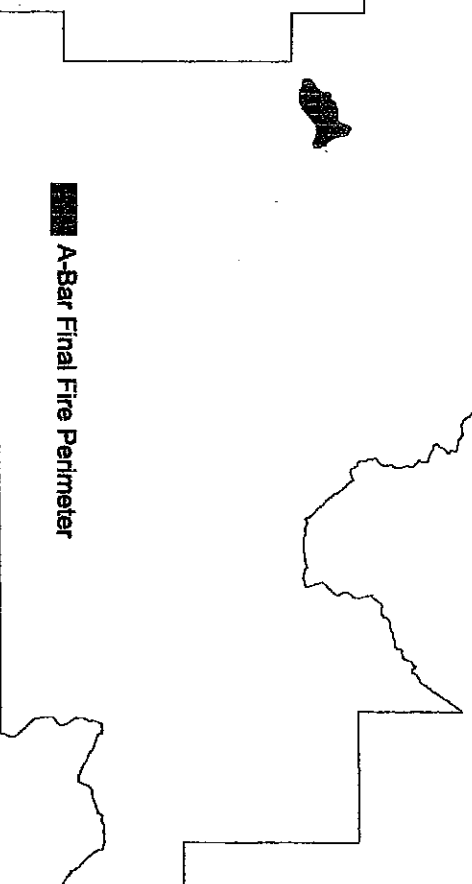


Prepared by Tauslin

# Coronado National Forest

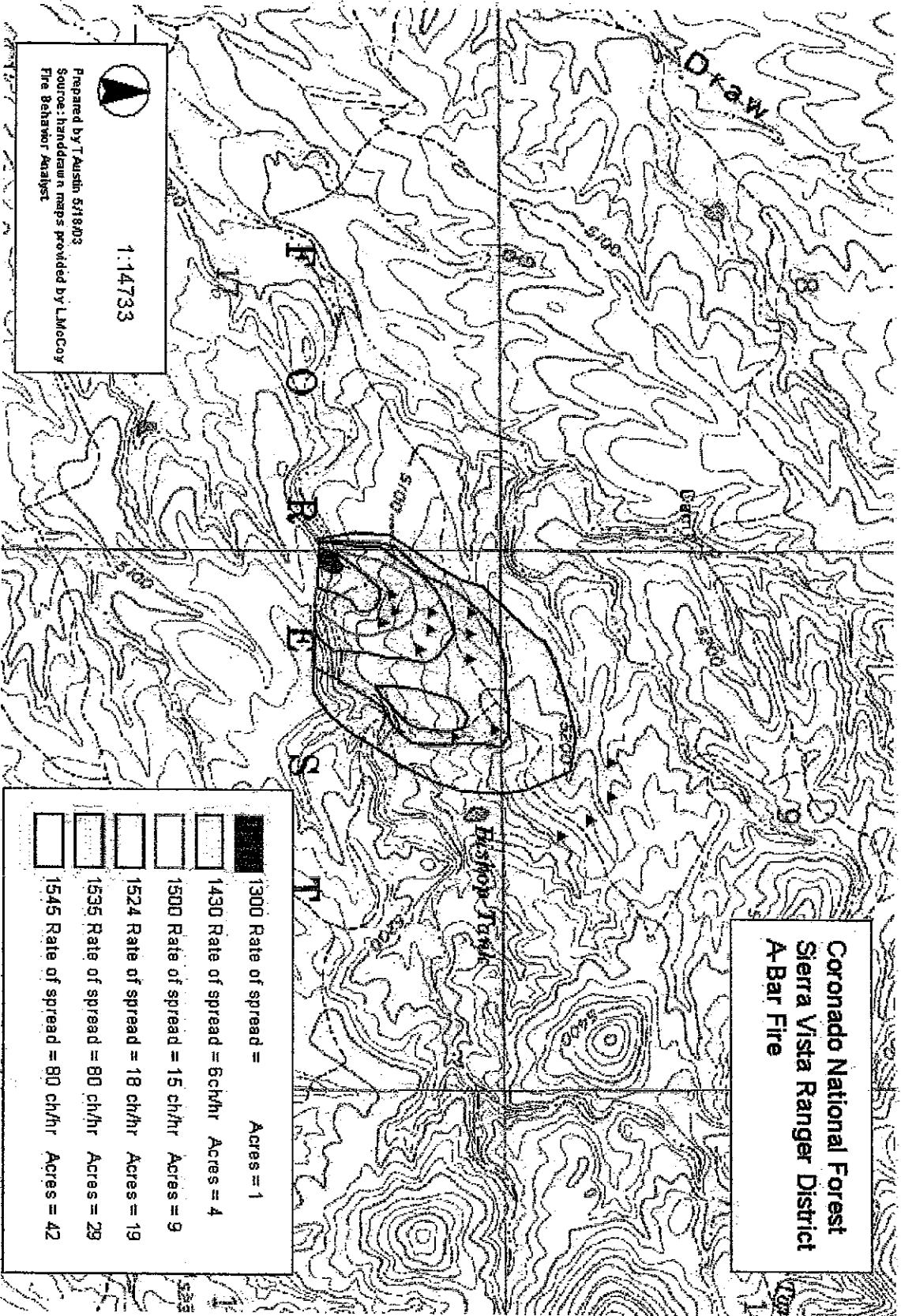


Sierra Vista Ranger District  
Huachuca Mountains



A-Bar Final Fire Perimeter





Draw







Point

Coronado National Forest  
Sierra Vista Ranger District  
A Bar Fire

Winds  
at 1520

Winds  
at 1500

Bishop Trail

	1300 Rate of spread =	Acres = 1
	1430 Rate of spread = 6ch/hr	Acres = 4
	1500 Rate of spread = 15 ch/hr	Acres = 9
	1524 Rate of spread = 18 ch/hr	Acres = 19
	1535 Rate of spread = 60 ch/hr	Acres = 29
	1545 Rate of spread = 80 ch/hr	Acres = 42



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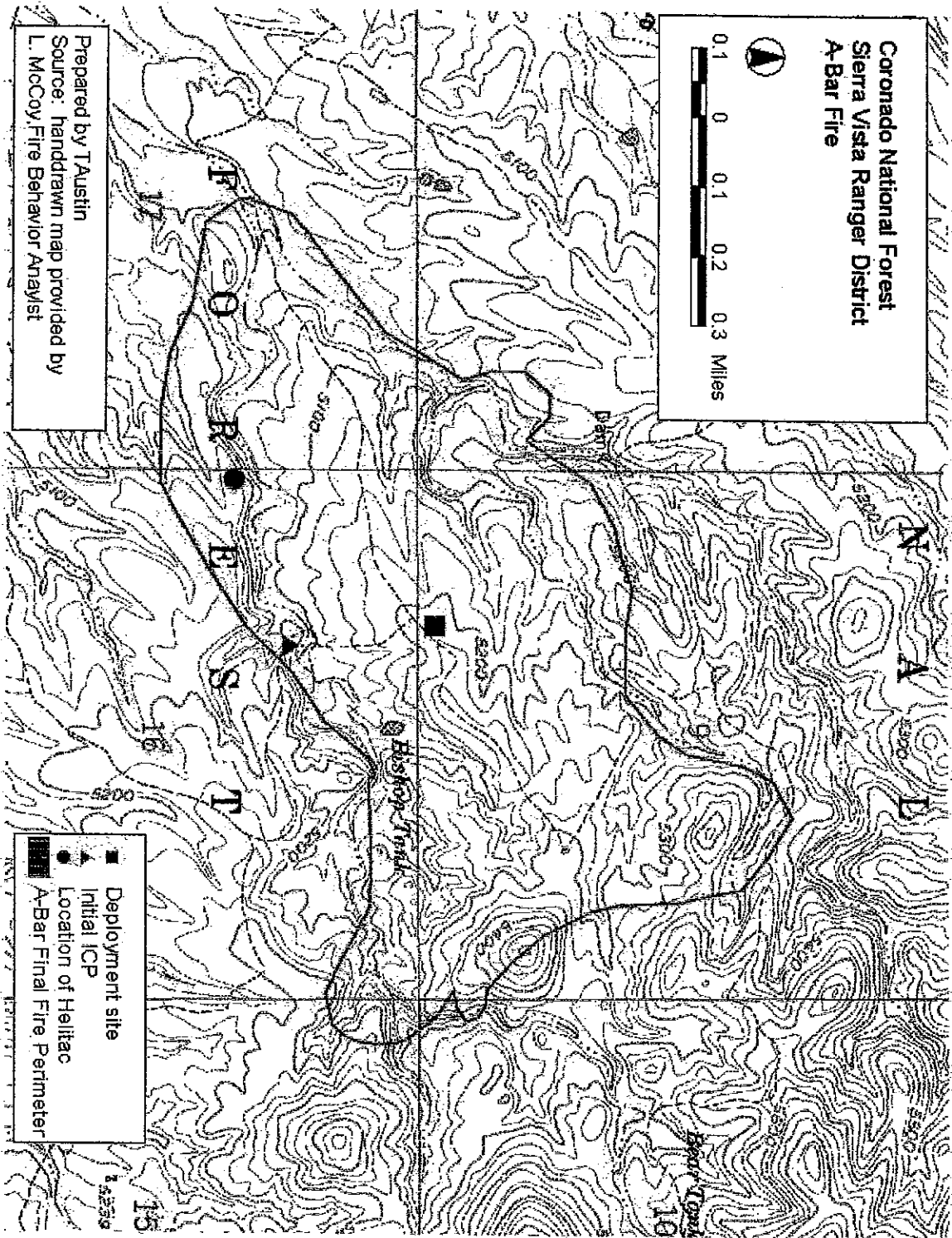
Prepared by T Austin 5/18/03  
Source: handdrawn map provided by  
LMcCoy, Fire Behavior Anasyst

Coronado National Forest  
Sierra Vista Ranger District  
A-Bar Fire



0.1 0 0.1 0.2 0.3 Miles

Prepared by T.Austin  
Source: handdrawn map provided by  
L. McCoy Fire Behavior Analyst



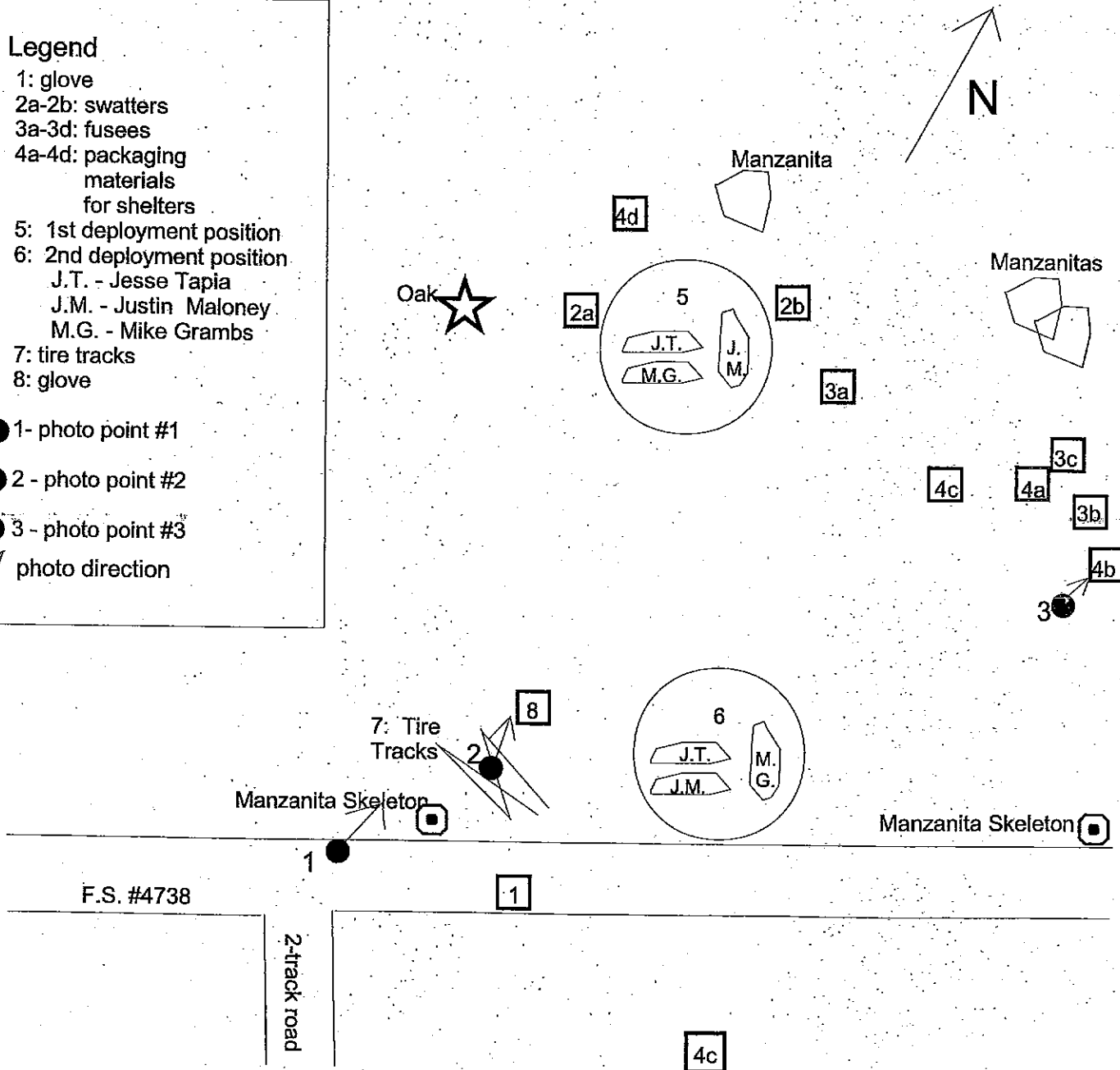
- Deployment site
- Initial ICP
- - - Location of Helitac
- ▬ A-Bar Final Fire Perimeter

# A-BAR DEPLOYMENT AREA 40' x 43'

## Legend

- 1: glove
- 2a-2b: swatters
- 3a-3d: fuses
- 4a-4d: packaging materials for shelters
- 5: 1st deployment position
- 6: 2nd deployment position
- J.T. - Jesse Tapia
- J.M. - Justin Maloney
- M.G. - Mike Grambs
- 7: tire tracks
- 8: glove

- 1 - photo point #1
- 2 - photo point #2
- 3 - photo point #3
- ↗ photo direction



NOT TO SCALE

Source: Mary Anna Wheat, 5/15/03  
Author: Terry Austin, 5/22/03

## Accident/Incident/Mishap Photo Log

**Incident:** A-Bar  
**Location:** Coronado NF  
**Date:** May 17, 2003

Photo Number	Subject	Camera Type, ASA and Film	Item Number and Remarks
1	Deployment Site	Olympus, Stylus Epic, DLX, 200, 35 mm	Facing Northeast standing in the SW edge
2	Deployment Area	Olympus, Stylus Epic, DLX, 200, 35 mm	Facing north, standing on the south edge of the deployment area at tire tracks
3	Plastic Fire Shelter Cover with pull tabs	Olympus, Digital, C-700 Ultra Zoom	Located within the deployment area
4	Glove – Side View	Olympus, Stylus Epic, DLX, 200, 35 mm	(8) Jesus Tapia – Right Glove
5	Fire Shelter	Olympus, Stylus Epic, DLX, 200, 35 mm	(10) Mike Grambs
6	Red Bag with contents	Olympus, Stylus Epic, DLX, 200, 35 mm	(10A) Mike Grambs – Used to suppress fire in back of truck
7	Fire Shelter	Olympus, Stylus Epic, DLX, 200, 35 mm	(11) Justin Maloney
8	Fire Shelter – Inside	Olympus, Stylus Epic, DLX, 200, 35 mm	(11) Justin Maloney
9	Tent	Olympus, Stylus Epic, DLX, 200, 35 mm	(11A) Justin Maloney – In back of truck
10	Fire Shelter	Olympus, Stylus Epic, DLX, 200, 35 mm	(12) Jesse Tapia
11	Drip Torch	Olympus, Stylus Epic, DLX, 200, 35 mm	(14) One of two drip torches tossed out of the back of the chase truck
12	Initial Deployment Site	Olympus, Digital, C-700 Ultra Zoom	Facing north, standing on the south edge of the deployment area on the road

## Accident/Incident/Mishap Photo Log

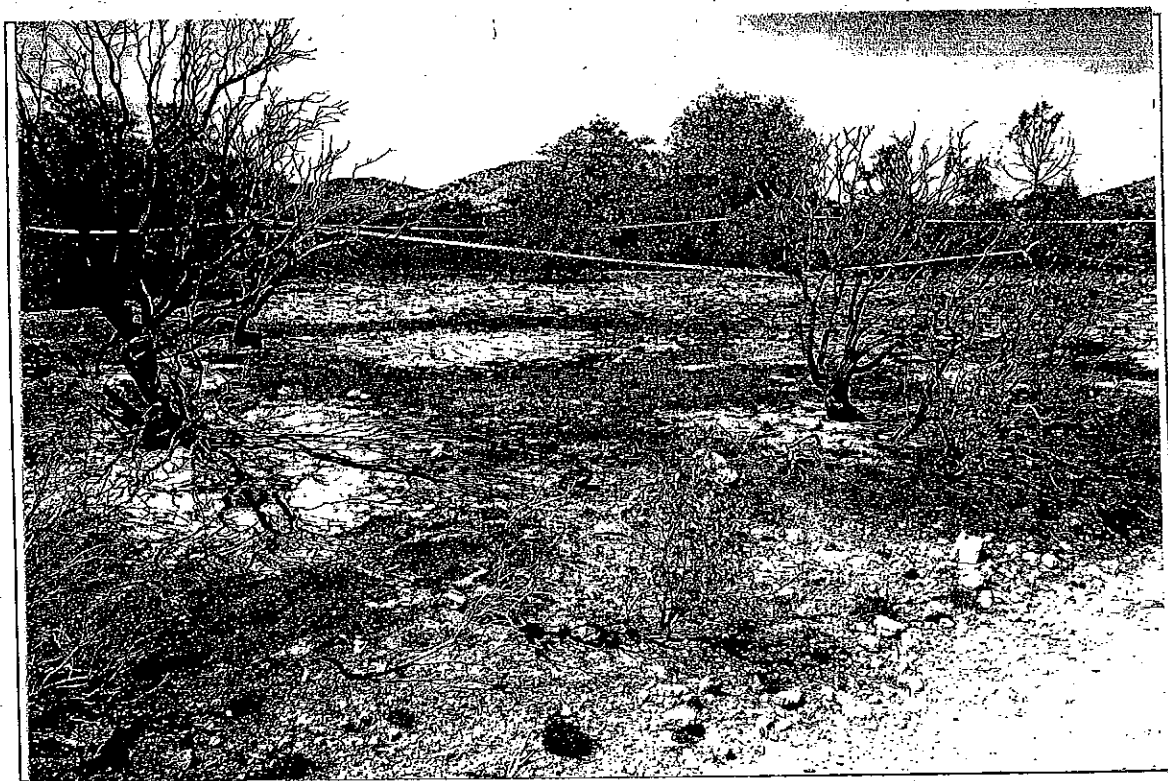
**Incident:** A-Bar  
**Location:** Coronado NF  
**Date:** May 17, 2003

Photo Number	Subject	Camera Type, ASA, and Film	Item Number and Remarks
13	Final Deployment Site	Olympus, Digital, C-700 Ultra Zoom	Relative location of crew members while deployed
14	Chase Truck	Olympus, Digital, C-700 Ultra Zoom	Chase Truck driven by McGee to pick up crew members at deployment site
15	Chase Truck Damage	Olympus, Digital, C-700 Ultra Zoom	Damage to the right rear panel by backing into a manzanita bush.
16	Rear view of chase truck, to include bumper	Olympus, Digital, C-700 Ultra Zoom	Bumper has burn spots in plastic on top of bumper
17	Burn spots on left side of chase truck bumper	Olympus, Digital, C-700 Ultra Zoom	Burn spots on left side of bumper
18	More burn spots on left side of chase truck bumper	Olympus, Digital, C-700 Ultra Zoom	Burn spots on left side of bumper
19	Left rear lamp area of chase truck	Olympus, Digital, C-700 Ultra Zoom	Paint blistering from heat
20	Inside the bed of the chase truck	Olympus, Digital, C-700 Ultra Zoom	Damage to cooler
21	Driver's side – Engine 22 (FS 3502)	Olympus, Digital, C-700 Ultra Zoom	No damage to side of vehicle during A-Bar fire
22	Passenger's side – Engine 22 (FS 3502)	Olympus, Digital, C-700 Ultra Zoom	No damage to side of vehicle during A-Bar fire

## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Stylus Epic, DLX  
**ASA:** 200  
**Film:** 35 mm.  
**Photo Number:** 1  
**Item Number:** N/A

**Subject Information:** Deployment Site



**Remarks:** Facing north, standing in the road facing the deployment area.

## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Stylus Epic, DLX  
**ASA:** 200  
**Film:** 35 mm  
**Photo Number:** 2  
**Item Number:** N/A

**Subject Information:** Deployment Area



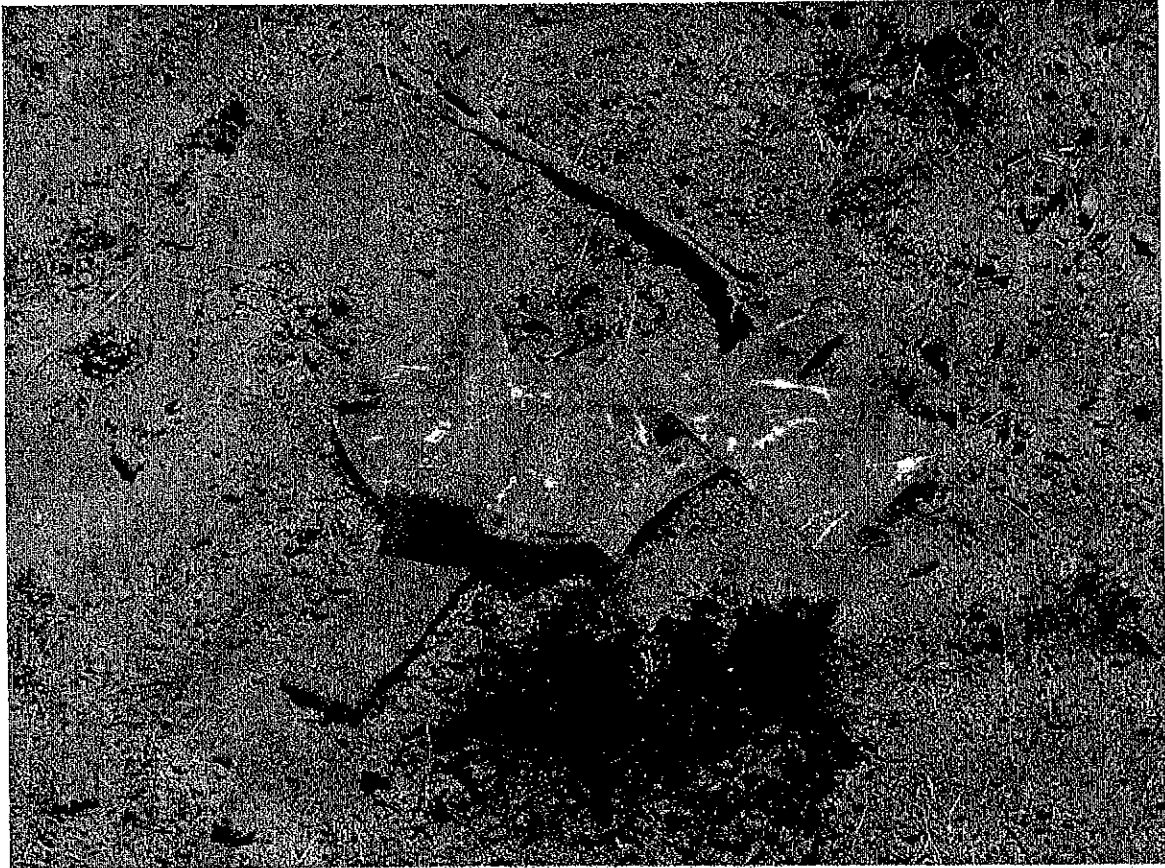
**Remarks:** Facing north, standing on the south edge of the deployment area at tire tracks.



## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Digital, C-700 Ultra Zoom  
**Photo Number:** 3

**Subject Information:** Plastic Fire Shelter Cover with pull tabs.

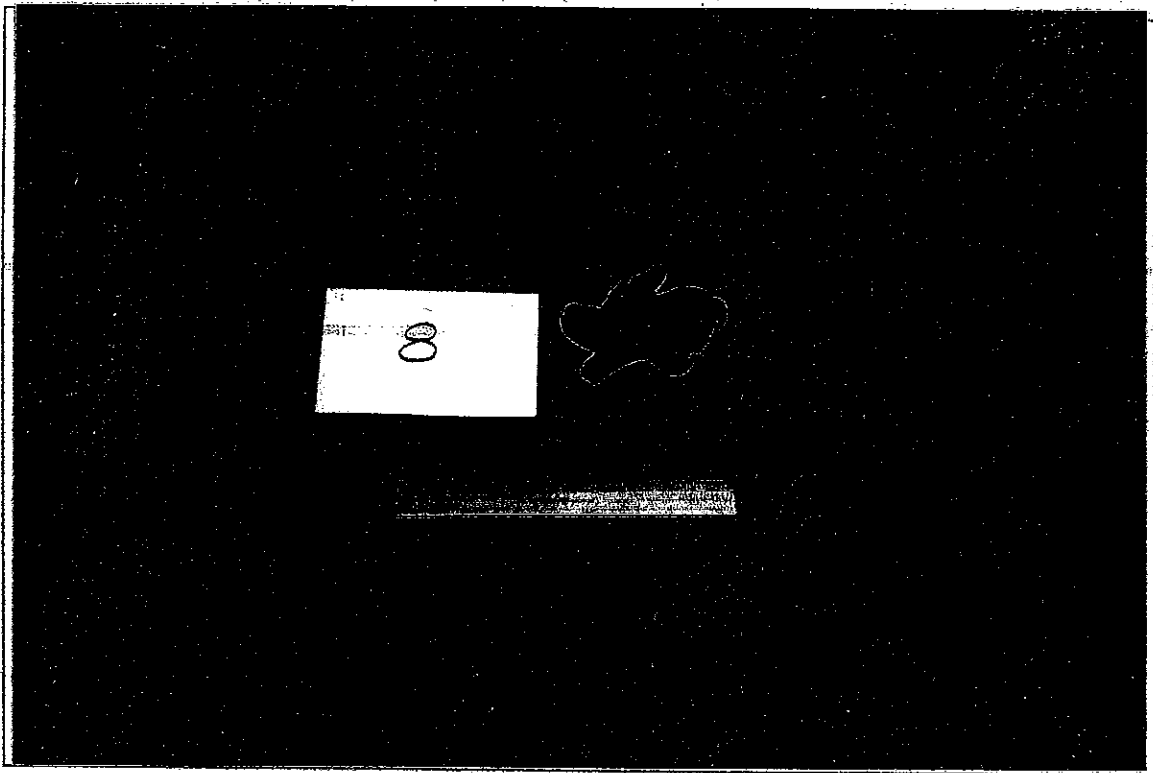


**Remarks:** Located within the deployment area.

## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Stylus Epic, DLX  
**ASA:** 200  
**Film:** 35 mm  
**Photo Number:** 4  
**Item Number:** 8

**Subject Information:** Glove – Side View



**Remarks:** Right Glove worn by Tapia, which was removed prior to deployment, because it was saturated with drip torch fuel. Located within the deployment area.

## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Stylus Epic, DLX  
**ASA:** 200  
**Film:** 35 mm  
**Photo Number:** 6  
**Item Number:** 10A

**Subject Information:** Red Bag with contents

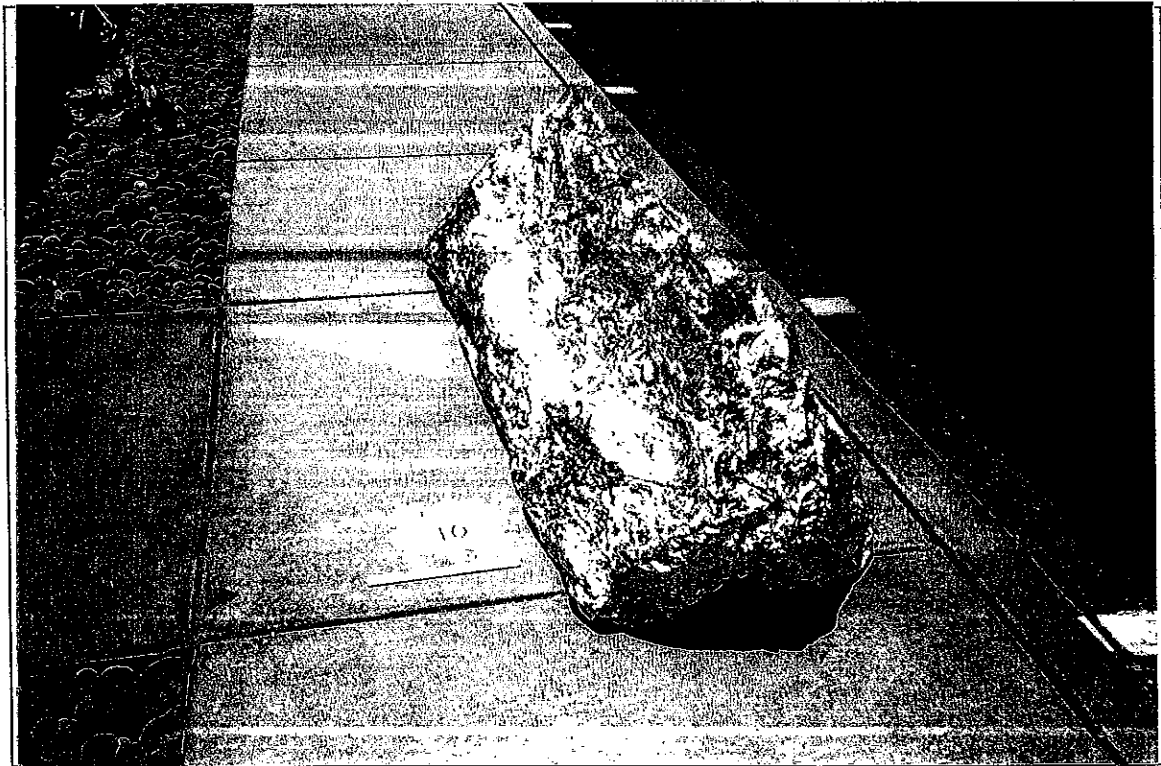


**Remarks:** Red bag belonging to Grambs, used by Maloney to suppress fire in the back of chase truck.

## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Stylus Epic, DLX  
**ASA:** 200  
**Film:** 35 mm  
**Photo Number:** 5  
**Item Number:** 10

**Subject Information:** Fire Shelter -- End View

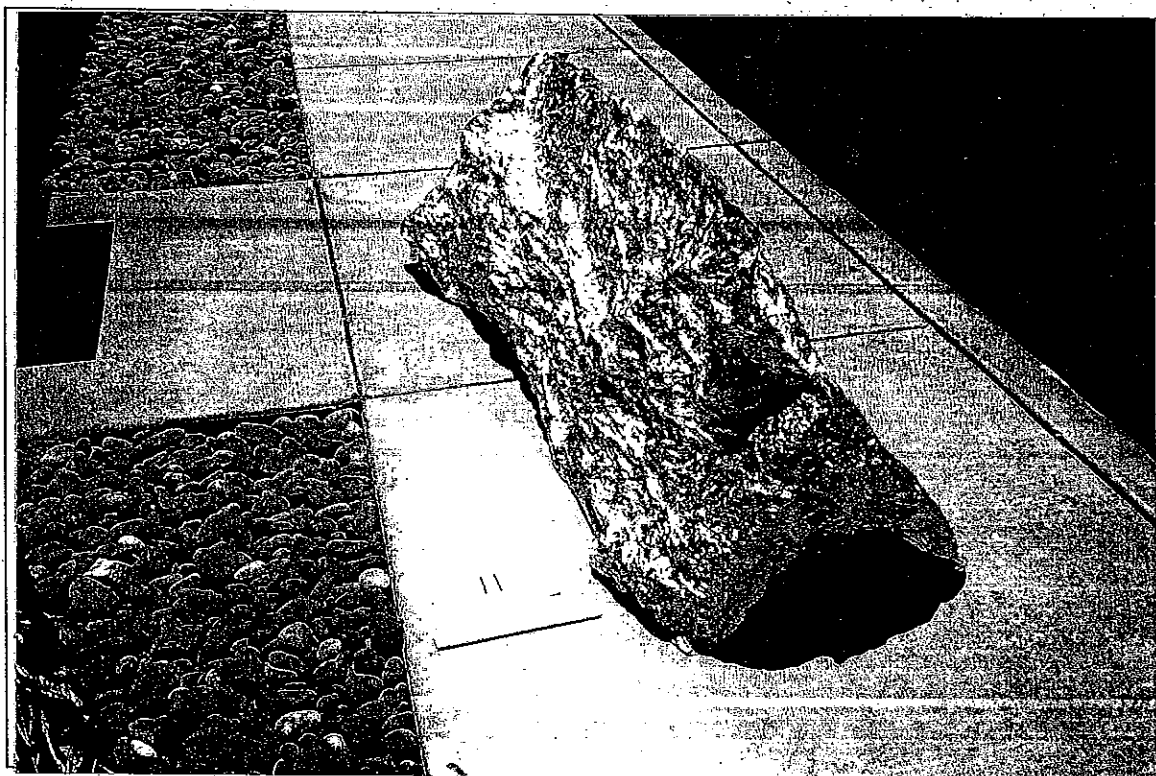


**Remarks:** Fire Shelter used in deployment by Grambs.

## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Stylus Epic, DLX  
**ASA:** 200  
**Film:** 35 mm  
**Photo Number:** 7  
**Item Number:** 11

**Subject Information:** Fire Shelter



**Remarks:** Fire Shelter used in deployment by Maloney. Burn pattern was the result of suppressing the fire in the back of the chase truck. See photo 8.

## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Stylus Epic, DLX  
**ASA:** 200  
**Film:** 35 mm  
**Photo Number:** 8  
**Item Number:** 11

**Subject Information:** Fire Shelter – Inside View



**Remarks:** Fire Shelter used in deployment by Maloney. Scorch marks on inside of Fire Shelter resulted from suppressing the fire in the back of the chase truck.

## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Stylus Epic, DLX  
**ASA:** 200  
**Film:** 35 mm  
**Photo Number:** 9  
**Item Number:** 11A

**Subject Information:** Tent



**Remarks:** Tent belonging to Maloney, which was damaged by the fire in the back of the chase truck.

## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Stylus Epic, DLX  
**ASA:** 200  
**Film:** 35 mm  
**Photo Number:** 10  
**Item Number:** 12

**Subject Information:** Fire Shelter -- End View



**Remarks:** Fire Shelter used in deployment by Tapia.

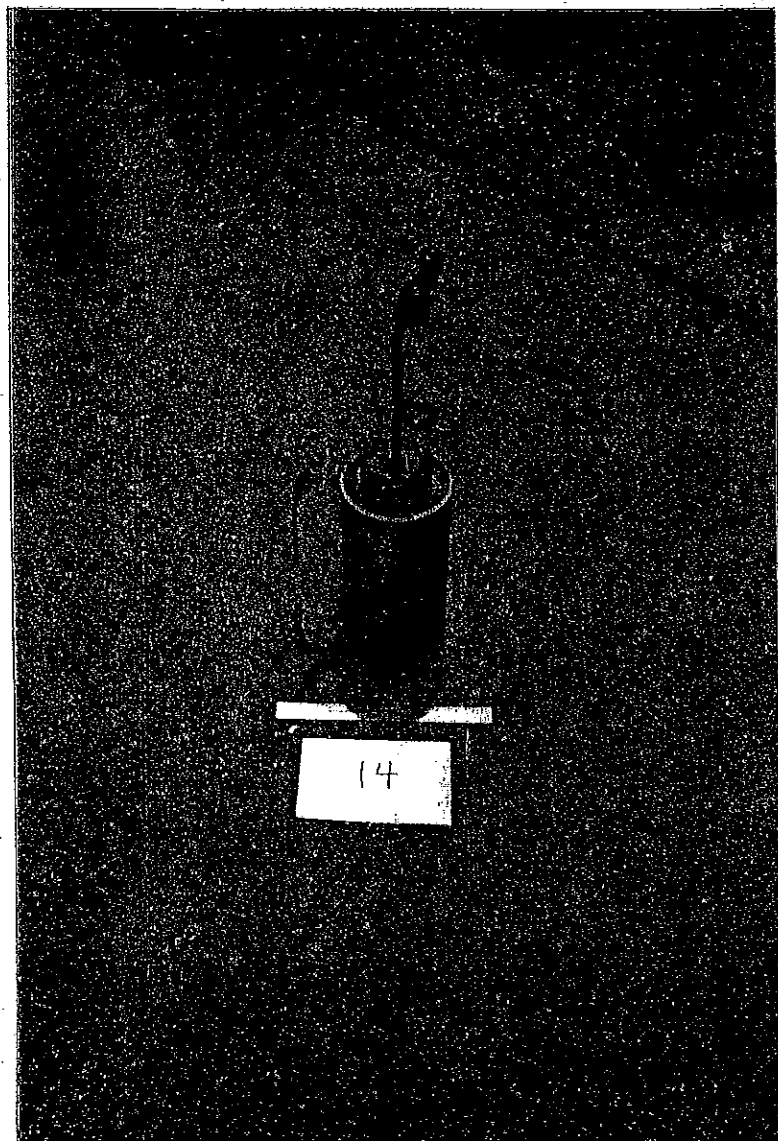


## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Stylus Epic, DLX  
**ASA:** 200  
**Film:** 35 mm  
**Photo Number:** 11  
**Item Number:** 14

**Subject Information:** Drip Torch

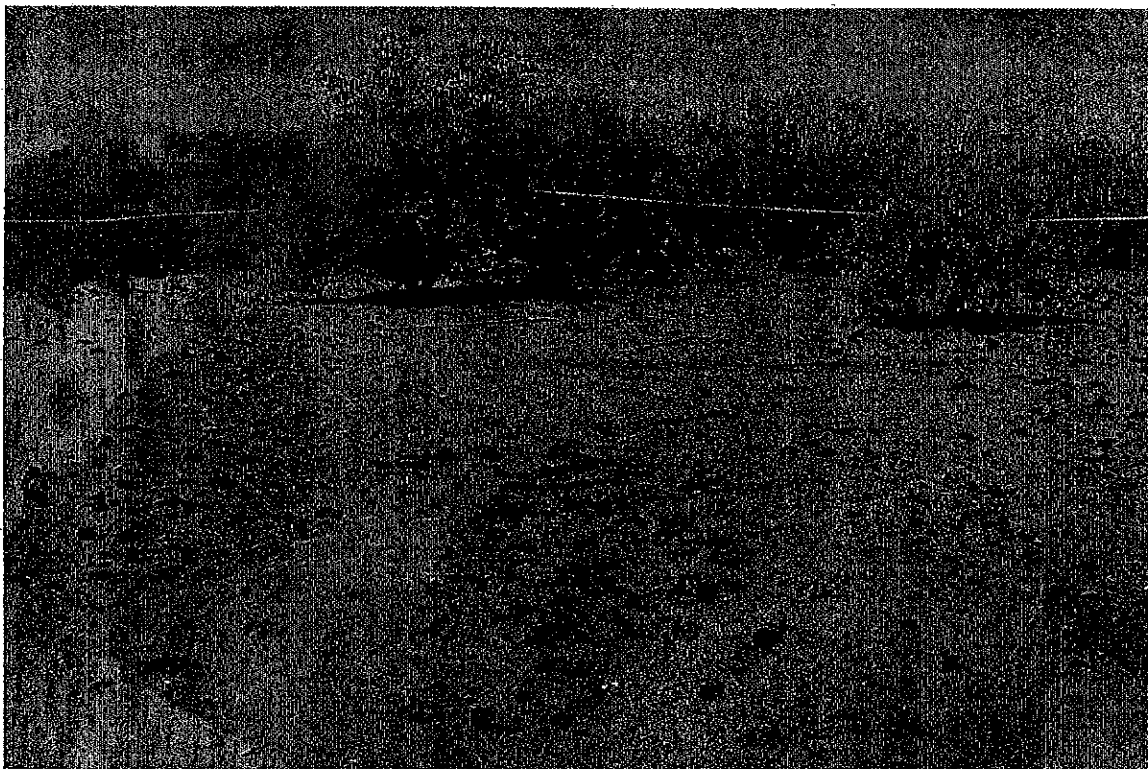
**Remarks:** One of two drip torches tossed out of the back of the chase truck.



## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Digital, C-700 Ultra Zoom  
**Photo Number:** 12

**Subject Information:** Initial Deployment Site



**Remarks:** Facing north, standing on the south edge of the deployment area on the road.

## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Digital, C-700 Ultra Zoom  
**Photo Number:** 13

**Subject Information:** Final Deployment Site

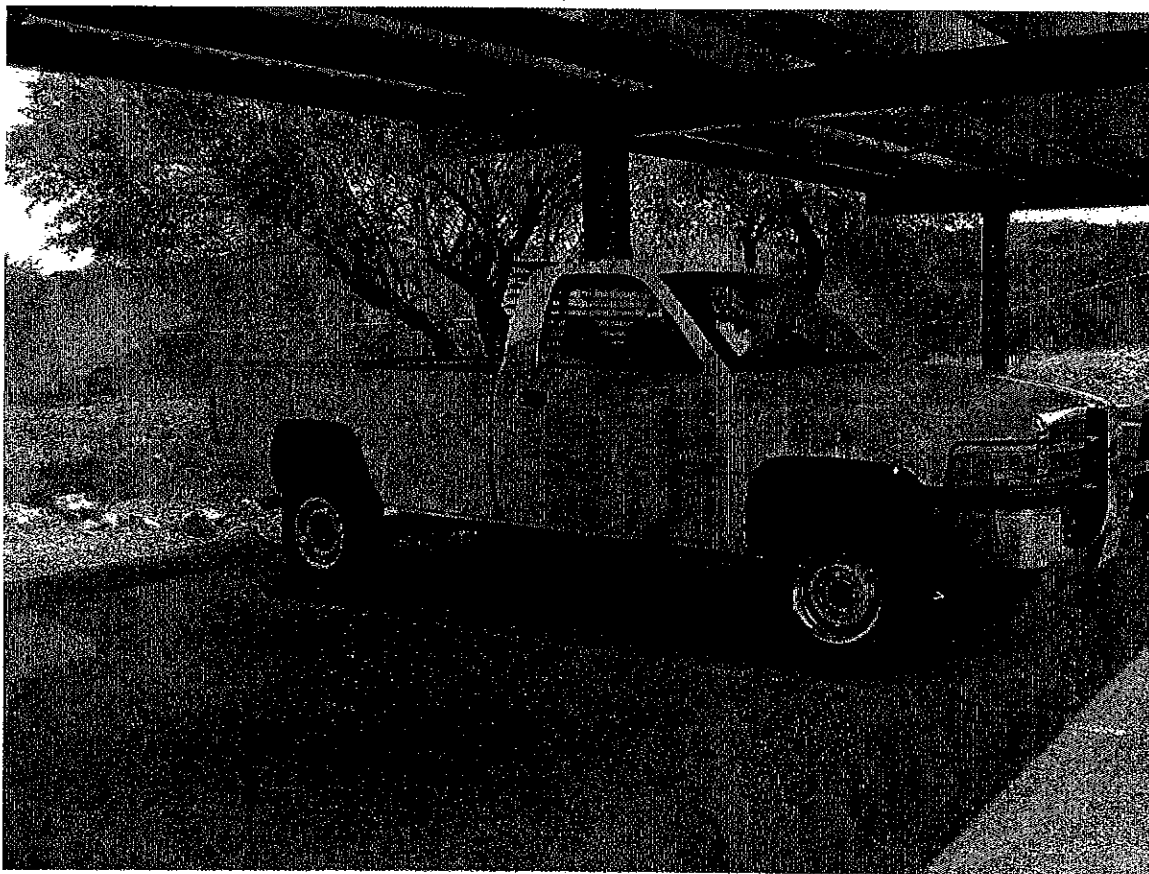


**Remarks:** Relative location of crew members while deployed.

## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Digital, C-700 Ultra Zoom  
**Photo Number:** 14

**Subject Information:** Chase Truck

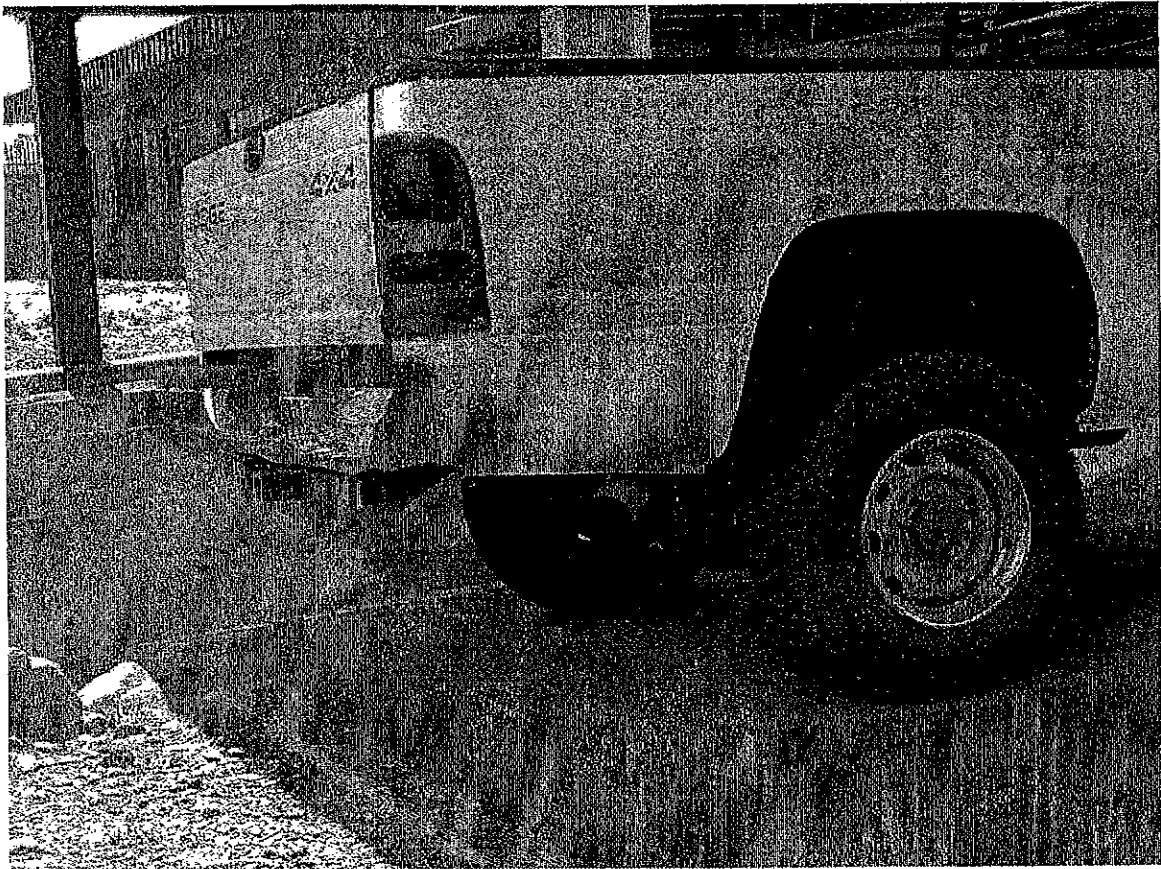


**Remarks:** Chase Truck driven by McGee to pick up crewmembers at deployment site.

## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Digital, C-700 Ultra Zoom  
**Photo Number:** 15

**Subject Information:** Chase Truck damage.

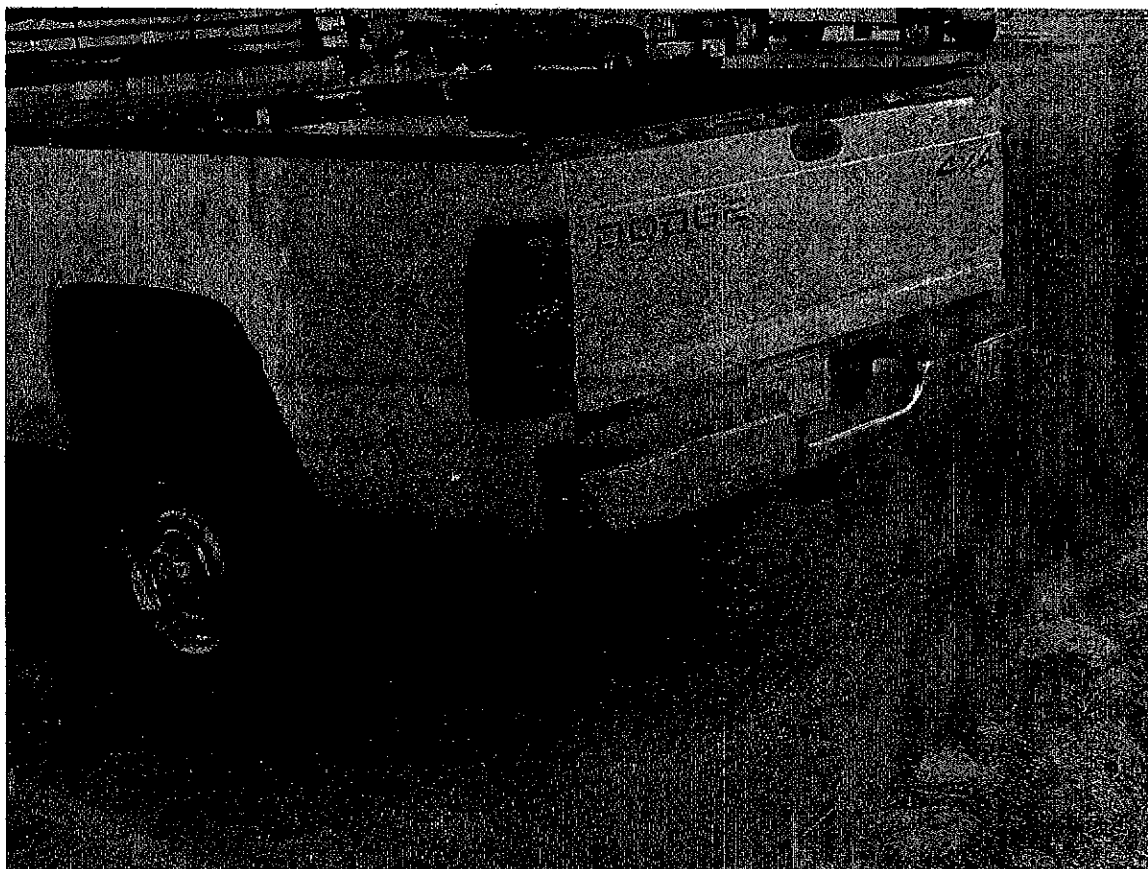


**Remarks:** Damage to the right rear panel by backing into a manzanita bush.

## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Digital, C-700 Ultra Zoom  
**Photo Number:** 16

**Subject Information:** Rear view of chase truck, to include the bumper.

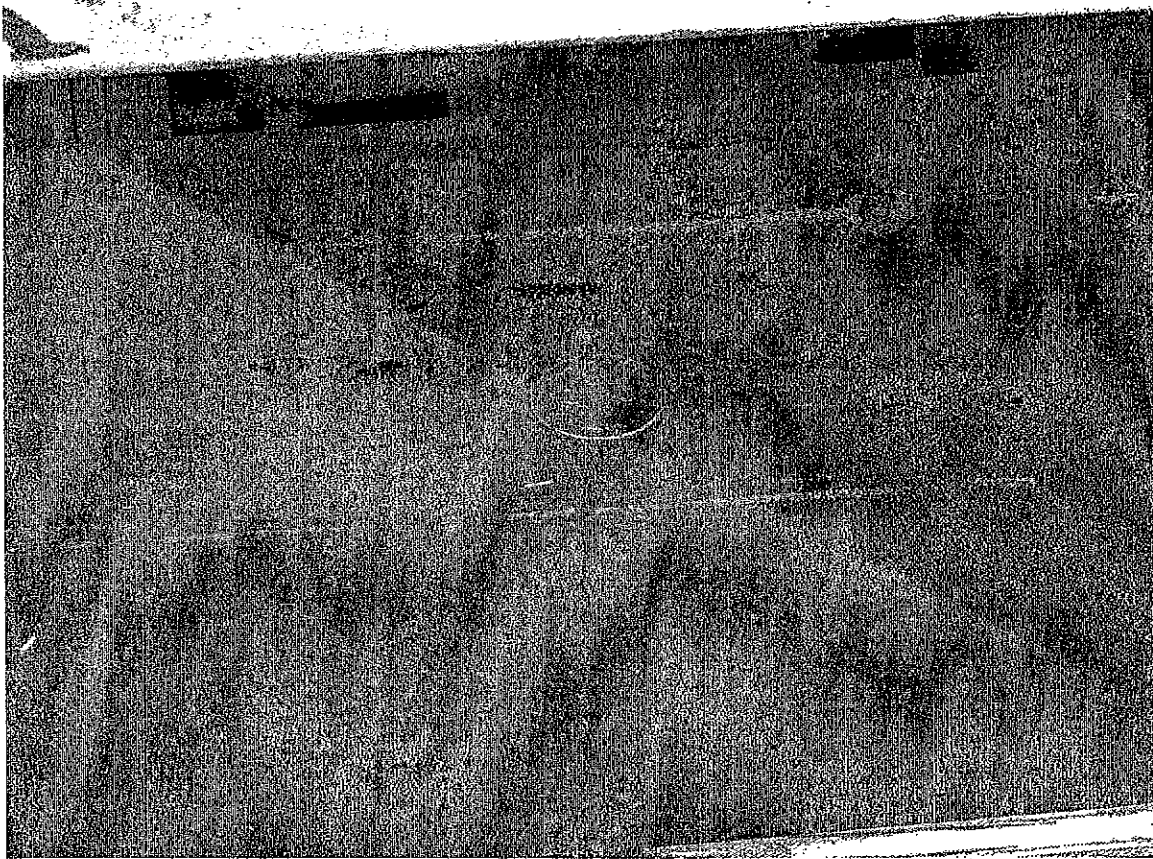


**Remarks:** Bumper has burn spots in plastic on top of bumper. See next two photos.

## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Digital, C-700 Ultra Zoom  
**Photo Number:** 18

**Subject Information:** Burn spots on left side of bumper of chase truck.



**Remarks:** Burn spots on left side of rear bumper.



## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Digital, C-700 Ultra Zoom  
**Photo Number:** 17

**Subject Information:** Burn spots on left side of bumper of chase truck.



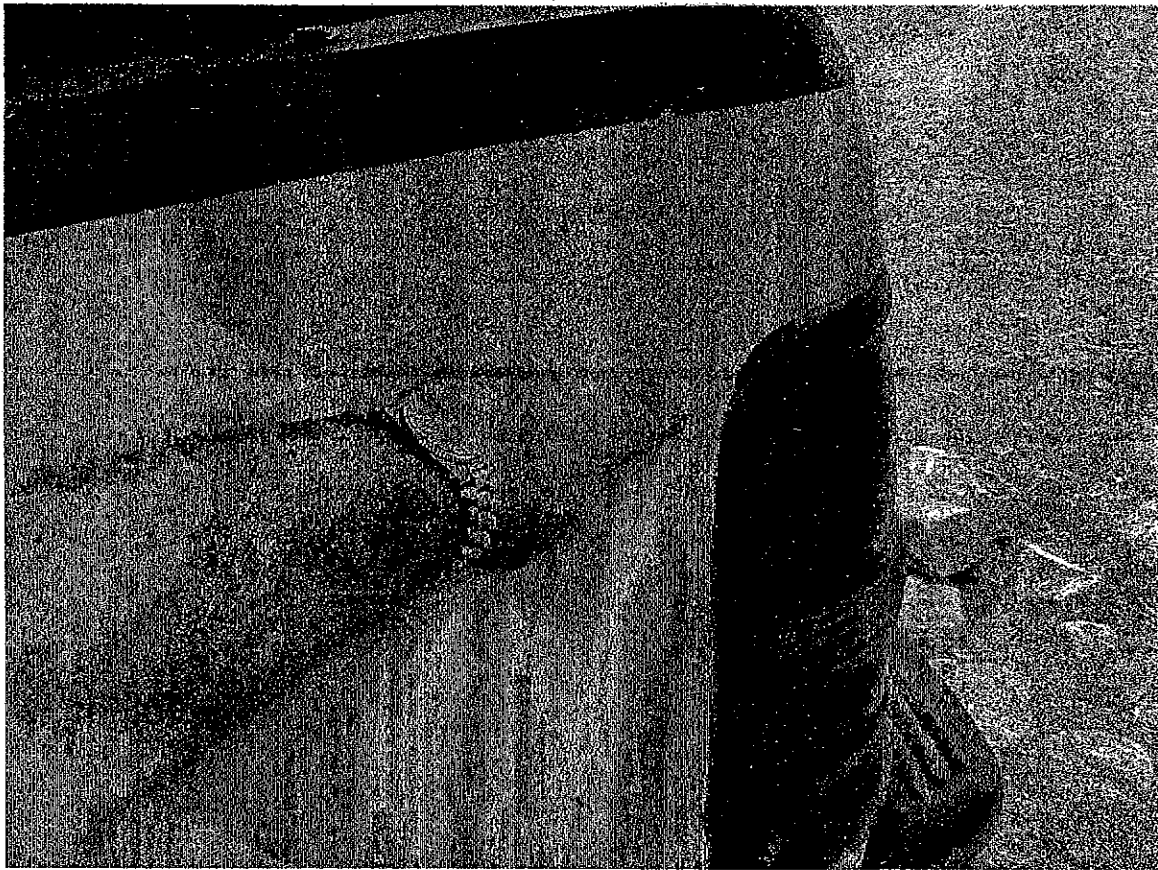
**Remarks:** Burn spots on left side of rear bumper.



## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Digital, C-700 Ultra Zoom  
**Photo Number:** 19

**Subject Information:** Left rear lamp area of chase truck.



**Remarks:** Paint blistering from heat.

## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Digital, C-700 Ultra Zoom  
**Photo Number:** 20

**Subject Information:** Inside the bed of the chase truck.

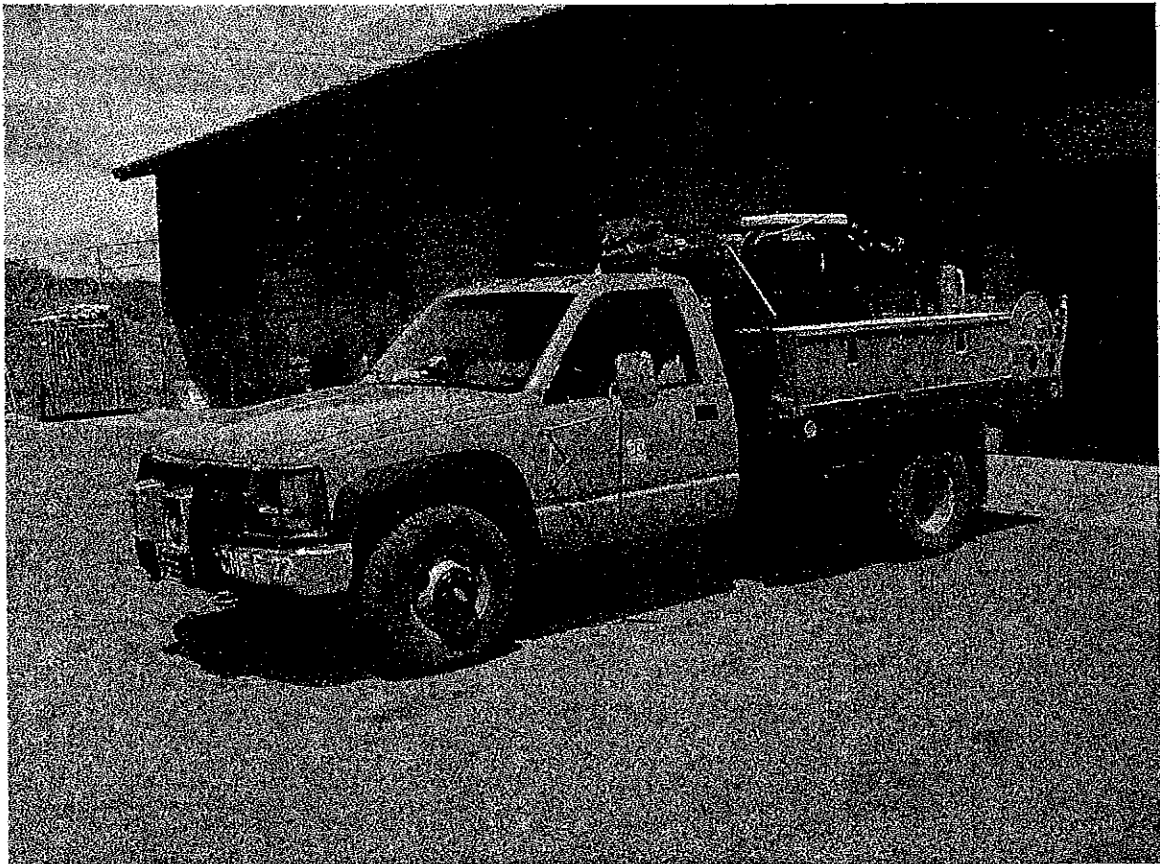


**Remarks:** Damage to cooler.

## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Digital, C-700 Ultra Zoom  
**Photo Number:** 21

**Subject Information:** Driver's side – Engine 22 (FS 3502)



**Remarks:** No damage to side of vehicle during A-Bar Fire.

## Photograph Documentation

**Incident:** A-Bar  
**Location:** Coronado National Forest  
**Photographer:** Gene Smalley  
**Date Taken:** May 17, 2003  
**Camera Type:** Olympus, Digital, C-700 Ultra Zoom  
**Photo Number:** 22

**Subject Information:** Passenger's side – Engine 22 (FS 3502)



**Remarks:** No damage to side of vehicle during A-Bar Fire.